

United States of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number ST02409NY-D

This certificate, issued to Delta Engineering
13 DRBA Way
New Castle County Airport
New Castle, Delaware 19720

certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 25 of the Federal Aviation Regulations.

Original Product — Type Certificate Number: A20WE
Make: Boeing
Model: 747-400 Series

Description of Type Design Change:

Installation of a Panasonic Avionics Corporation System 3000 In-Flight Passenger Entertainment System in accordance with Delta Engineering Master Data List 0107-06164-2168 Revision A dated Dec. 29, 2008 or later FAA approved revisions to Delta Engineering Master Data List previously listed. Continued Airworthiness 0707-06171-2168 and Airplane Flight Manual Supplement 0607-06170-2168 as listed on the Master Data List are required with this installation.

Limitations and Conditions:

1. If the holder agrees to permit another person to use the certificate to alter the product, the holder shall give the other person written evidence of that permission.
2. Compatibility of this design change with previously approved modifications must be determined by the installer.

(See Continuation Sheet 2)

This certificate and the supporting data which is the basis for approval shall remain in effect surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: December 11, 2007

Date reissued:

Date of issuance: January 14, 2009

Date amended:



By direction of the Administrator

John A. Moritz
John A. Moritz
Lead DAS Administrator
Delta Engineering, DAS-800728-NE
(Title)

Any Alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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(Continuation Sheet)

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Issuance date: Jan. 14, 2009

Limitations and Conditions (continued):

3. The Panasonic Avionics Corporation System 3000 In-Flight Entertainment System must interface with the following listed required existing components/systems, which must be installed in a manner acceptable to the FAA Administrator, The below listed required existing components/systems are not approved by this STC.

Required existing components/systems:

Component/System	Manufacture	Model	Additional Requirements
Cabin Configuration	JADE	-	LOPA as listed on Delta Engineering Master Data List 0107-06164-2168 FAA STC Number ST01958SE
Aircraft ACESS Database	JADE	-	FAA STC Number ST01958SE

4. This modification may not be installed after August 30, 2010 unless (1) previously approved electrical wiring interconnection system (EWIS) instructions for continued airworthiness (ICA) have been evaluated and determined to be adequate for this installation by the FAA, or (2) revised EWIS ICA have been approved by the FAA Oversight Office. (Refer to §26.11)

Certification Basis:

Based on 14 CFR §§ 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for the Boeing 747-400 Series aircraft with this STC is as follows:

- a. The type certification basis for Boeing 747-400 Series airplanes is shown on TCDS A20WE for parts **not changed or not affected** by the change.
- b. The certification basis for parts **changed or affected** by the change since the reference date of application, Dec. 11, 2007 is based upon part 25 as amended by Amendment 25-122. Based on 14 CFR §§ 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis for this modification was determined to be as shown on the TCDS A20WE except the regulations listed below:

Section	Title	At Amendment
25.831	Ventilation	25-89
25.853	Compartment interiors	25-116
25.869	Fire protection; systems	25-113
25.981	Fuel tank ignition prevention	25-102
25.1307	Miscellaneous equipment	25-72
25.1351	General	25-72
25.1353	Electrical equipment and installations	25-113
25.1423	Public address system	25-115
25.1431	Electronic equipment	25-113
25.1529	Instructions for Continued Airworthiness	25-54
25.1557	Miscellaneous markings and placards	25-72
25.1581	General	25-72
25.1583	Operating limitations	25-105
25.1585	Operating procedures	25-105
26.11	EWIS	26-0
26.47	Aging Aircraft Safety Rule	26-1

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